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EXAMINER

SHAW, JOSEPH D

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/636,003

Applicant(s)

LAYMAN ET AL.

Examiner

Joseph D Shaw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-35, 37-47 and 49-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-35, 37-47 and 49-79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2, 20, 38-39, 55, 58, 61, and 65-66 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

- a. Specifically, the claims require a limitation that allow a data structure to specify whether the entity intended to process the data structure must understand the data structure. While the specification makes reference to a "mustUnderstand" flag, this flag is not used to specify if a data structure must be understood by an entity. Rather, this flag indicates whether the entity must obey the semantics of the data structure, and if it cannot, it fails to process the message. Therefore, if the "mustUnderstand" flag is disabled, the entity that is intended to process the data structure does not have to obey the semantics of the data structure.

If the claims are to be interpreted as an entity actually understanding the data structure, the examiner invites the applicant to point out where in the specification this is disclosed. Furthermore, the examiner wonders why an entity that is intended to process the data

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structure must be told it has to understand the data structure. What is the point of specifying an entity to process a data structure if it does not need to understand it?

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 7, 19, 37, 49-54, 64, and 71 are rejected under 35 U.S.C. 102(e) as being anticipated by Fuisz et al. (6,389,455).

b. As per claim 1, Fuisz teaches:

generating a message envelope (inherent that the envelope discussed was generated; col. 4, lines 65-67); and

generating contents of the message envelope, the contents comprising data structures, each data structure identifies which entity is intended to process the data structure when that entity receives the message envelope over the network (header and body structures, header is set off from the body, header is updated by Mail Transfer Agents and bounce hub only needs to work on header, body can be left for recipient; col. 4, lines 19-31; col. 4, line 65 - col. 5, line 5; col. 5, lines 29-34).

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c. Claims 19, 37, 49-54 and 64 claim similar limitations to that of claim 1 and are rejected on the same grounds as claim 1.

As per claims 19, 37, 50-51, 53-54 and 64, Fuisz further teaches:

transmitting a message envelope of a message from an origin entity to a destination entity via one or more intermediate entities on the network (Fig. 1; col. 3, line 55 - col. 4, line 5; col. 4, lines 19-31);

parsing a message envelope and its contents (bounce hub extracts "to" and "from" information; col. 5, lines 19-28); and

the message comprising at least one request by one entity on a network of another entity on the network to perform a task (inherent that the receiving computer is to handle the email in some fashion).

d. As per claim 7, Fuisz discloses the claimed invention described above in claim 1 and furthermore teaches:

sending the message envelope to an entity on a network (Fig. 1, col. 3, lines 55-67).

e. Claim 71 claims similar limitations to that of claim 7 and is rejected on the same grounds as claim 7.

f. As per claim 26, Fuisz discloses the claimed invention described above in claim 19 and furthermore teaches:

at least one of the data structures including a request for an intermediate entity to perform a task (header is updated by every mail transfer agent and the bounce hub; col. 4, line 65 - col. 5, line 10; col. 5, lines 19-34).

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 20, 38, 55, 58, 61, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuisz et al. (6,389,455) in view of Lefebvre et al. (US 2002/0010665).

g. As per claim 2, Fuisz discloses the claimed invention described above in claim 1. However, Fuisz does not explicitly teach data structures specifying whether the entity intended to process the data structure must understand the data structure. Lefebvre teaches:

data structures specifying whether the entity intended to process the data structure must understand such data structure (a DTD is used to specify the rules a document must conform to and is used in grammatically analyzing the document, a DTD is not required in all documents; page 10, paragraphs 0116-0121).

It would have been obvious to one of ordinary skill in the art to modify the Fuisz invention to include specifying if an entity should understand a data structure it is to process, as taught by Lefebvre, because for important messages communicated, specifying the need for understanding ensures the document is formatted with respect to the rules so that it is much less prone to having or causing errors, as taught by Lefebvre (page 10, paragraph 0116).

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h. Claims 20, 38, and 65 claim similar limitations to that of claim 2 and are rejected on the same grounds as claim 2.

i. As per claim 55, Fuisz teaches:

providing a sending entity in communication with a network of entities (Fig. 1);

generating contents of a message envelope of a message, the contents comprising a header data structure which identifies an intermediate entity as that which is intended to process the header structure and a body data structure which identifies a destination entity as that which is intended to process the body data structure (header and body structures, header is set off from the body, header is updated by Mail Transfer Agents and bounce hub only needs to work on header, body can be left for recipient; col. 4, lines 19-31; col. 4, line 65 - col. 5, line 5; col. 5, lines 29-34).

However, Fuisz does not explicitly teach data structures specifying whether the entity intended to process the data structure must understand the data structure. Lefebvre teaches:

data structures specifying whether the entity intended to process the data structure must understand such data structure (a DTD is used to specify the rules a document must conform to and is used in grammatically analyzing the document, a DTD is not required in all documents; page 10, paragraphs 0116-0121).

It would have been obvious to one of ordinary skill in the art to modify the Fuisz invention to include specifying if an entity should understand a data structure it is to process, as taught by Lefebvre, because for important messages communicated, specifying the need for

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understanding ensures the document is formatted with respect to the rules so that it is much less prone to having or causing errors, as taught by Lefebvre (page 10, paragraph 0116).

Claims 58 and 61 claim similar limitations to that of claim 55 and are rejected on the same grounds as claim 55.

7. Claims 56-57, 59-60, and 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuisz et al. (6,389,455) in view of Lefebvre et al. (US 2002/0010665) and further in view of Hemphill et al. (6,167,448).

j. As per claim 57, Fuisz discloses the claimed invention modified above as described in claim 55. However, the modified Fuisz invention does not explicitly teach the header or body data being expressed in XML. Hemphill teaches that messages across a network can be formatted in a Markup Language, namely extensible Markup Language (XML; col. 1, lines 40-47).

It would have been obvious to one of ordinary skill in the art at the time of the invention to express the data structures in the modified Fuisz invention in XML, as taught by Hemphill, because XML provides a flexible and powerful method of notification of management events, as taught by Hemphill (col. 1, lines 48-52).

k. Claims 56, 59-60, and 62-63 claim similar limitations to that of claim 57 and are rejected on the same grounds as claim 57.

8. Claims 4, 6, 8, 22, 24, 25, 42, 44, 45, 68, 70, and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuisz et al. (6,389,455).

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l. As per claim 4, Fuisz discloses the claimed invention described above in claim 1 and furthermore teaches:

a header data structure (col. lines 65-67); and

a body data structure (col. lines 65-67).

However, the Fuisz invention does not explicitly teach the body data structure including message data. "Official Notice" is taken that both the concept and advantages of having the body of a message contain message data are well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have the message body in the Fuisz invention include message data because this would allow the sending entity to communicate actual data to the receiving entity, not just hollow data structures.

m. Claims 22, 42, and 68 claim similar limitations to that of claim 4 and are rejected on the same grounds as claim 4.

n. As per claim 6, Fuisz discloses the claimed invention modified above as described in claim 1 and furthermore teaches:

the header data structure being intended for at least one intermediate entity and the body data structure is intended for a destination entity (header and body structures, header is set off from the body, header is updated by Mail Transfer Agents and bounce hub only needs to work on header, body can be left for recipient; col. 4, lines 19-31; col. 4, line 65 - col. 5, line 5; col. 5, lines 29-34).

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o. Claims 24, 44, and 70 claim similar limitations to that of claim 6 and are rejected on the same grounds as claim 6.

p. As per claim 8, Fuisz discloses the claimed invention described above in claim 1. However, Fuisz does not *explicitly* teach the data structures including a request for an entity to perform a task, wherein the data structures lack instructions for performing the task. "Official Notice" is taken that both the concept and advantages of an email being sent from one computer to another computer for the purpose of the second computer displaying the email are well known and expected in the art. Therefore, the emails sent in Fuisz are requesting the second computer to perform a task of displaying the email. "Official Notice" is also taken that it is well known and expected in the art that email can contain no executable instructions that cause a computer to display the email, rather just the data to be displayed by the executable instructions on the second computer.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the data structures in the Fuisz invention request an entity to perform a task wherein the data structures contain no executable code because this would allow for users of email systems to have different email programs, each with their own executable code, and allow the email to contain only data needed by the executable code to perform the task of displaying the email.

q. Claims 25, 45, and 72 claim similar limitations to that of claim 8 and are rejected on the same grounds as claim 8.

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9. Claims 3, 5, 9-10, 14-17, 21, 23, 27-28, 32-35, 41, 43, 46-47, 67, 69, 73-74, and 78-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuisz et al. (6,389,455) in view of Connolly (Hypertext Markup Language - 2.0), and further in view of Hemphill et al. (6,167,448).

r. As per claim 17, Fuisz discloses the claimed modified invention described above in claim 4. However, Fuisz does not explicitly teach a message envelope format, envelope, header, or body tags, and expressing the data in XML. Connolly teaches:

a message envelope having the format of:

```
<Envelope label>
    <Header label>
        header data
    </Header label>
    <Body label>
        message data
    </Body label>
</Envelope label> (section 3.4);
```

the <Envelope label> being a beginning envelope tag, the </Envelope label> being an ending envelope tag, and the Envelope label identifying the message envelope (start-tags are delimited by '<' and '>', like <HTML>, and end-tags are delimited by '</' and '>', like </HTML>, wherein start and end tags identify the start and end of an element; page 7, 5th definition; page 9, 2nd definition; section 3.2.2, paragraph 1);

the <Header label> being a beginning header tag, the </Header label> being an ending header tag, and the Header label identifying the header data structure (start-tags are delimited by '<' and '>', like

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<HEAD>, and end-tags are delimited by '</' and '>', like </HEAD>, wherein start and end tags identify the start and end of an element; page 7, 5th definition; page 9, 2nd definition; section 3.2.2, paragraph 1); and

the <Body label> being a beginning body tag, the </Body label> being an ending body tag, and the Body label identifying the body data structure (start-tags are delimited by '<' and '>', like <BODY>, and end-tags are delimited by '</' and '>', like </BODY>, wherein start and end tags identify the start and end of an element; page 7, 5th definition; page 9, 2nd definition; section 3.2.2, paragraph 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include tags to define the beginning and end of a data structure, as taught by Connolly, in the Fuisz invention because tags delimit elements and allow for the definition of the content in an element, as taught by Connolly (section 3.2.2).

However, the modified Fuisz invention does not explicitly teach the header or body data being expressed in XML. Hemphill teaches that messages across a network can be formatted in a Markup Language, namely extensible Markup Language (XML; col. 1, lines 40-47).

It would have been obvious to one of ordinary skill in the art at the time of the invention to express the data structures in the modified Fuisz invention in XML, as taught by Hemphill, because XML provides a flexible and powerful method of notification of management events, as taught by Hemphill (col. 1, lines 48-52).

s. Claims 3, 5, 9-10, 14-16, 21, 23, 27-28, 32-35, 41, 43, 46-47, 67, 69, 73-74, and 78-79 contains limitations that are either similar

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to, or contained within, claim 17 and are rejected on the same grounds as claim 17.

10. Claims 11-13, 29-31, and 75-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuisz et al. (6,389,455) in view of Hemphill et al. (6,167,448).

t. As per claims 11-13, Fuisz discloses the claimed invention described above in claim 1. However, Fuisz does not explicitly teach formatting the message envelope for HTTP transmission, binding the message envelope into a HTTP request or response, or sending the envelope via HTTP. Hemphill teaches:

formatting a message envelope for sending over a network using HTTP (col. 2, lines 7-10); and

sending the message envelope to an entity on the network by using HTTP (col. 2, lines 7-10, lines 27-30).

However, Hemphill does not explicitly teach binding the message to an HTTP request or response. "Official Notice" is taken that both the concept and advantages of binding a message to be sent over a network to an HTTP response or request are well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have the messages of the Fuisz formatted for HTTP, as taught by Hemphill, and to further bind those HTTP messages to an HTTP request or response because HTTP is a well known transmission protocol for transmitting data across networks.

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u. Claims 29-31 and 75-77 claim similar limitations to that of claims 11-13 and are rejected on the same grounds as claims 11-13.

11. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuisz et al. (6,389,455) in view of Postel (Transmission Control Protocol).

v. As per claim 40, Fuisz discloses the claimed invention described above in claim 37. However, Fuisz does not explicitly teach the sending of response messages. Postel teaches:

sending a response message to a sending entity on the network (messaging protocol includes positive acknowledgement from the receiving entity; section 1.5, page 4, Reliability).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include sending a response to the sending entity, as taught by Postel, in the Fuisz invention because it would allow for the system to recover from damaged or lost data as taught by Postel (section 1.5, page 4, Reliability).

12. Claim 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuisz et al. (6,389,455), in view of Lefebvre et al. (US 2002/0010665), and further in view of Morelli (5,838,720).

w. As per claim 66, Fuisz discloses the claimed modified invention described above in claim 65. However, the modified Fuisz invention does not explicitly teach specifying error notification in the data structure. Morelli teaches:

the data structures specifying whether the entity that is intended to process the data structure must respond if it does not

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understand such data structure (determines if the packet is the type that requires a response if errors are detected; col. 9, lines 1-22).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include specifying if a response is required if the entity did not understand the data structure, as taught by Morelli, in the modified Fuisz invention because that way a sender of the data structure can flag critical information, forcing recipients to respond if there is an error, letting the sender know that the critical information was not correctly handled.

x. Claim 39 claims similar limitations to that of claim 66 and is rejected on the same ground as claim 66.

Response to Arguments

13. Applicant's arguments filed February 25th, 2004 with regards to identifying entities intended to process data structures have been fully considered but they are not persuasive.

y. Applicant argues that the prior art fails to teach the data structures indicating an entity on the network that is intended to process the data structure. The examiner disagrees. Fuisz teaches that the header of the email messages is acted upon by all mail transfer agents and the bounce hub. These entities have no need to interact with the body of the email message. Furthermore, it is well known in the art that a machine that is the ultimate recipient of that email generally processes the body of an email in order to display it. Fuisz teaches a fine distinction between the header and the body of an email message, indicating that they are set apart by a null line (col.

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4, line 64 - col. 5, line 10. This provides the mail transfer agents and the bounce hub with an indication of where the header they need to process ends. Since the header of the email is passed by the bounce system for re-addressing (col. 5, lines 29-34), the bounce system ensures all emails are routed through the bounce hub (col. 5, lines 35-48), and the header is updated by every mail transfer agent, the header, by virtue of its format, inherently specifies all of these entities as entities intended to process the header. Similarly, by virtue of the body format (it being set apart from the header by a null line), none of these entities are required to process the body, and therefore the body inherently indicates the ultimate recipient as the entity intended to process the body.

14. Applicant's arguments filed February 25th, 2004 with respect to the fact a receiving entity must understand the data structure have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lefebvre et al. (US 2002/0010665) and Morelli (5,838,720).

15. Applicant's arguments filed February 25th, 2004 in regards to the Official Notice taken with regards to the binding of a message to an HTTP response or request have been fully considered but they are not persuasive. The Official Notice presented in the last Office action is maintained.

z. The applicant is entitled to traverse any/all official notice taken in this action according to MPEP § 2144.03, namely, "if applicant traverses such an assertion, the examiner should cite a reference in support of his or her position". However, MPEP § 2144.03 further

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states "See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice)." Specifically, In re Boon, 169 USPQ 231, 234 states "as we held in Ahlert, an applicant must be given the opportunity to challenge either the correctness of the fact asserted or the notoriety or repute of the reference cited in support of the assertion. We did not mean to imply by this statement that a bald challenge, with nothing more, would be all that was needed". Further note that 37 CFR § 1.671(c)(3) states "Judicial notice means official notice". Thus, a traversal by the applicant that is merely "a bald challenge, with nothing more" will be given very little weight.

However, to be complete, the examiner supplies the reference *Hypertext Transfer Protocol - HTTP/1.1*, authored by T. Berners-Lee et al. In section 1.1 (Purpose), Berners-Lee teaches that messages can be transferred on the request/response semantics of HTTP. Furthermore, sections 5 (Request) and section 6 (Response) go into full detail on how the request/response semantics of HTTP work. Furthermore, Berners-Lee clearly sets forth in section 1.1 (Purpose) the motivation for binding messages to an HTTP request or response.

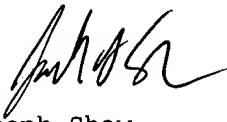
Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Shaw whose telephone number is 703-305-0094. The examiner can normally be reached on Monday - Thursday and alternate Fridays, 7am - 4pm.


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17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharja can be reached on 703-305-4003. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public-PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph Shaw
Examiner
AU 2141



RUPAL DHARIA
SUPERVISORY PATENT EXAMINER